Chapter 15

Alternative Realities: Immersive Learning for and with Students

Sue Gregory
University of New England, Australia

Torsten Reiners
University of Hamburg, Germany

Belinda Tynan
University of New England, Australia

ABSTRACT

As students increasingly engage with alternative social networking (or realities) there is a scope for educators to explore whether they pose opportunities for rethinking learning and teaching spaces. The authors argue that there is a requirement to shift away from mapping traditional thinking about what constitutes a learning experience when considering virtual worlds. This chapter draws upon two case studies that have provided two distinctly different learning designs for Logistics students and pre-service teachers. These cases, alongside a comprehensive review of the use of virtual worlds in education will draw out issues and factors which need to be considered when pursuing virtual worlds as learning spaces. Specifically, discussion and recommendations will have a focus on pedagogical, organisational, equity and access, cultural, economic and social factors relevant to the use of virtual worlds in distance education.

INTRODUCTION

Over that last years, the Web changed from a producer-to-consumer (Web 1.0) to a consumer-producer (Web 2.0) philosophy where the social networking became the fundamental concept for new services; see Facebook (2009), LinkedIn (2009) or YouTube (2009). Everyone is able to contribute – e.g. writing blogs, twitter or submit new Wikipedia entries to a common knowledge base where information is shared rather than collected in decentralized databases for private usage. Collaboration is lived and information becomes a common good being organized by the crowd. One outcome of this era is the virtual worlds which combine most of the features of the Web 2.0 but within a 3-dimensional space, or as it is generally called, world. In this chapter, we take a look at virtual worlds but focus on learning and teaching in this environment as it provides new and chal-
lenging opportunities to rethink the classroom and curriculum design, especially in a distance education context.

Despite critics, virtual worlds are emerging as a technology that cannot be ignored for their possibilities for distance education. This chapter has as a focus on two case studies that are drawn from two distinct disciplinary fields and from two distinctly different organisations. The University of New England is a large distance education university located in a regional setting on the Northern Tablelands of New South Wales, Australia. More than 80% of students are learning by distance and are considered to be off campus. The other, the University of Hamburg, is a large urban University located in Germany which has most of its students learning on-campus.

The authors from these varied contexts will illustrate and provide analysis of student experiences (both as on and off-campus students) of two different uses of virtual worlds. This is important for the substantive discussion of factors which may influence the adoption and success, or otherwise, of the use of virtual worlds as a learning and teaching space. Interview extracts with experts, lecturers and students, constitute further data for critical analysis and are included to show that the ‘feel’ of immersion is not bound to a physical real world but can be simulated and still result in a realistic purposeful learning experience. The interviews reveal learning and teaching requirements and expectations, which are discussed and reviewed alongside the literature and pedagogical models.

The authors are reporting on their experiences in the use of Second Life, a virtual world established by Linden Lab and acknowledges the range and diversity of alternative virtual realities available. They see that there is transferability of ideas and believe the use of one virtual reality over another may not necessarily impact on the ideas. The idea of virtual worlds or 3D-environments is demonstrated and used in many different forms in the past. For example in movies like the Star Trek Next Generation-series, which used a Holodeck to project different (real) environments into a restricted space, or simulations for training dangerous situations. Nevertheless, the concept, functionality and design of Second Life can be tracked back to the novel “Snow Crash” (Stephenson, 1994), where people escape the real world (as opposed to virtual world) through a technological device into a Metaverse where they are represented by avatars which are virtual representations of themselves. The Second Life world consists of regions, so called islands with 65536 sqm each, which can be designed by their inhabitants without any limitation and used for all purposes like building new homes, businesses (N.N., 2008), educational institutions (SimTeach, 2008), recreation areas, museums (Second Life Wikia, 2008), historical places, governments and embassies like Sweden, Estonia or U.S., or fantasy locations; see also (Second Life Grid, 2008; Second Life Wiki, 2008; Tapley, 2007). The virtual world of Second Life that was used for these projects has been created by the users for the users (Linden Research, 2008b). As at November 2008 there were over 16 million registered users, in a one week period there were over 580,000 members logged in with approximately 60,000 users online at the one time. In relation to educational institutions using Second Life, there are variations with the literature:

- More than 250 universities were using Second Life as an educational tool (Calonge, 2007)
- Over 100 virtual lands currently being used by educational institutions around the world with the majority of University campuses based in the United States (Linden Research, 2007a)
- John Lester, the Academic Program Manager at Linden Lab, states “there are more like 1,000 educational institutions
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